Instructional Design Document for Course, FrameMaker 201

March 27, 2005

I. Scope of the Course
(Refer to URL: http://training.usgs.gov/TEL/IL2TEL/DesignDoc/OutlineI.html **for more information)**

A. Requesting Organization

1. USGS, WRD

B. Requestor

1. Regional Hydrologist, CR

2. Science and Technical Employee Development Committee (STED)

C. Course Title and Keywords

1. FrameMaker 201

2. FrameMaker, Adobe, Desktop Publishing, Frame, USGS, Graphics, Filters, Page Design, Templates, Smart Spaces, Frames, Tables, Anchored Frames, Master Pages, FrameMath, equations, Book File, PDF

D. Course Goal(s)

1. The student will be able to independently use FrameMaker to prepare various forms, reports, posters, brochures, and documents.

E. Audience Analysis

1. FrameMaker is the required publishing tool of the USGS; anyone that does USGS reports, forms or posters must use Adobe FrameMaker.

2. Audience for this course will be a mixture of Hydrologists, Hydro Techs and supporting personnel, such as Editors, Editorial Assistants, Administrative Technicians, Administrative Officers, Secretaries, Office Automation Specialists, and so forth.

3. Audience will have beginner skills with FrameMaker upon taking this course because FrameMaker 101 is a prerequisite.

4. Audience is globally diverse and training is needed upon demand.

F. Prerequisite(s)

1. FrameMaker 101

    a) Please contact Gloria Armstrong at gjarmstr@usgs.gov to enroll in FrameMaker 101.

II. Course Delivery and Media Sources
(Refer to URL: http://training.usgs.gov/TEL/IL2TEL/DesignDoc/OutlineII.html **for more information)**

A. Content

1. The content of this course will include 4 lessons, a pre-course and post-course assessment, post-lesson assessments, and an interactive Q&A session using Breeze Live.

B. Method(s)

1. The majority of this course will be delivered as technology enabled learning (TEL) via the web.

2. A FrameMath question and answer event, using Breeze Live, will occur on September 9, 2005 at 9:00 a.m. MST to give the students a chance to ask questions and to interact with each other and the Instructors.

3. The TEL web-delivered course will include an e-mail link to the Instructor. There will also be a Discuss link to an on-line discussion board so that students can interact with each other and the Instructor while taking the course.

C. Training Time

1. The TEL web-delivered course will be completed in 3 months.

2. Total training time for student to complete the course will be approximately 3 hours, sectionalized as follows:

    a) Pre-Course Assessment = 15 min.

    b) Lesson 1 = 15 min.

    c) Post Lesson Assessment = 10 min.

    d) Lesson 2 = 15 min.

    e) Post Lesson Assessment = 10 min.

    f) Learner Activity = 5 min.

    g) Lesson 3 = 15 min.

    h) Learner Activity = 10 min.

    i) Post Lesson Assessment = 10 min.

j) Etc…

k) Post-Course Assessment = 20 min.

D. Problems and Opportunities

1. This course was taught previously in the classroom. It was noted on many student evaluations that the FrameMath section should be a separate course. We are going to prototype this TEL web-delivered course with FrameMath as a lesson and see how it is received. If student evaluations are showing that students are still not getting enough instruction in FrameMath, we will make it another course.

2. A problem may exist in that the student may not be given the time to complete the TEL web-based course at work.

III. Objectives
(Refer to URL: http://training.usgs.gov/TEL/IL2TEL/DesignDoc/OutlineIII.html **for more information)**

A. Lesson Objectives

1. **Lesson 1—Overview of FrameMaker v. 7.0:** At the end of this lesson, the student will be able to:

a) recognize that FrameMaker is a complete publishing system that can be used to produce various types of documents.

b) recognize the importance of using FrameMaker templates when creating specialized documents.

c) identify the different applications for using FrameMaker within their day-to-day work.

2. **Lesson 2—Creating FrameMaker Documents:** At the end of this lesson, the student will be able to:

a) create a new FrameMaker document.

b) create a document from a template.

c) create and edit the template.

d) recognize the difference between Master pages and Body pages within a template.

3. **Lesson 3—Editing FrameMaker Documents:** At the end of this lesson, the student will be able to:

a) use FrameMaker keyboard shortcuts.

b) create paragraph formats, and apply them appropriately, with the Paragraph Designer.

c) create symbols from the Character Designer.

      d)   cut and paste text and graphics within the same document and to another FrameMaker documents.

      e)   copy and past text and graphics within the same document and to other FrameMaker documents.

      f)   recognize when to use Smart spaces and Smart quotes.

      g)   apply paragraph formatting appropriately.

      h)   recognize the type of formatting that can be changed under each of the six Properties tabs in the Paragraph Designer.

4. **Lesson 4—FrameMath:** At the end of this lesson, the student will be able to:

      a)   create various types of equations.

      b)   insert special characters within equations.

      c)   recognize what parts of the equation need to be selected before an operator can be added.

      d)   automatically have FrameMath number the equations throughout a document.

      e)   recognize the different equation properties in each of the nine FrameMath palettes.

IV. Training Materials
(Refer to URL: http://training.usgs.gov/TEL/IL2TEL/DesignDoc/OutlineIV.html **for more information)**

A. Training materials to be developed for the TEL Web-Delivered Course include:

1. Job aids (print-based) for:

      a)   Character-design sets for building equations.

      b)   Saving a FrameMaker file into different file types.

2. Breeze Live, interactive sessions:

      a)   FrameMath question and answer event.

3. Questions for Pre-Course, Post-Course and Post-Lesson assessments. Lead Instructional Designer will create these assessments using the Breeze product. Additional Instructional Designers will give the Lead Designer their assessment questions and answer keys.

4. Links to FrameMaker support web sites.

V. Instructional Design Team Members and Their Roles/Responsibilities
(Refer to URL: http://training.usgs.gov/TEL/IL2TEL/DesignDoc/OutlineV.html **for more information)**

A. Instructional Design Team includes:

1. Lead Instructional Designer:
(TEL Courses Must have a Lead Instructional Designer)

    a) Bertrom A. Bogus, IT Specialist, USGS, WRD, Sacramento, CA;
mailto:babogus@usgs.gov

    b) Responsible for:

        (1) making sure that the course is instructionally sound using Instructional Systems Design (ISD) process.

        (2) Writing/defining course goal(s) and lesson objectives for the course.

        (3) creating the Instructional Design Document with input from other subject-matter experts (SMEs)/Instructional Designers.

        (4) managing deadlines and milestones throughout the course development process.

        (5) coordinating personnel for testing after each lesson is completed.

        (6) coordinating personnel for final Quality Control Check and testing before course is deployed.

        (7) making sure that additional Instructional Designers are using the USGS TEL PowerPoint (PPT) templates for any of the course materials for which they are responsible.

        (8) combining all PPT Presentations, from additional Instructional Designers, into one file and transferring that PPT file to the Macromedia Breeze server.

        (9) adding assessment questions and making sure that all assessment questions for the pre-course and post-course assessments and all lesson assessments coincide with course and lesson objectives.

        (10) making sure that the course includes plenty of interactive student activities and exercises.

        (11) creating and implementing an evaluation forms to measure learning.

        (12) updating the course as needed based on evaluation feedback and changes in technology/tools that are defined in the course.

2. Additional Instructional Designers:
(Optional)

    a) Peter Poindexter, Senior Editorial Assistant, USGS, WRD, Sacramento, CA; ppoindex@usgs.gov

    b) Responsible for:

        (1) creating/re-developing course materials in PPT using the USGS TEL Slide Templates.

        (2) incorporating sound ISD methodology within lessons.

        (3) informing the Lead Instructional Designer when lessons are ready to be tested.

        (4) writing lesson objectives for the FrameMath section.

        (5) writing good lesson assessment questions based on the objectives written for #4 above.

        (6) building in plenty of interactive student activities/exercises, etc.

        (7) giving the final PPT presentation to the Lead Instructional Designer so that he/she can transfer the file to the Breeze server and add the assessment questions that have been defined in #5 above.

        (8) making revisions to lessons, as needed, in PPT and then transferring the PPT over to the Lead Instructional Designer to transfer to the Breeze server.

3. Office of Employee Development
(Required)

    a) Tj Lane, OED TEL Project Chief, USGS, Denver, CO; mailto:tjlane@usgs.gov (available throughout the development of the course and after course is deployed)

        (1) Responsible for:

            (a) making sure that the course is instructionally sound using Instructional Systems Design (ISD) process.
            (b) issuing Breeze license to Certified Lead Instructional Designer
            (c) reviewing completed IDD to determine if learning objectives are sequenced in an orderly fashion that provides the best opportunity for learning, e.g., arranging the learning objective from easy to hard or in the order they are performed on the job.
            (d) coaching on ISD and TEL web-based delivery techniques throughout course development, if needed/requested.
            (e) testing each lesson after it is completed, along with student testers and additional Instructional Designers on the Design Team, giving Lead Instructional Designer comments and feedback on the lesson.
            (f) helping the Lead Instructional Designer with any aspects of the course (course activities, graphics, etc.).
            (g) doing the final QA/QC test of the course; giving Lead Instructional Designer comments and feedback on the course.
            (h) announcing the course through proper channels.

(i) publishing the final course to the Shared Directory on the Breeze Server for deployment.

(j) reissuing Breeze license to Lead Instructional Designer when revisions need to be done to the course.

(k) adding relevant and helpful information to the OED TEL website to assist Instructional Designers. The URL for the website is: http://training.usgs.gov/TEL/TELIndex.html

b) Russel Smith, OED IT Specialist, USGS, Denver, CO; mailto:rsmtihjr@usgs.gov

(1) Responsible for:

(a) Assisting the Lead Instructional Designer with Breeze Live events/meetings.

4. Graphics Illustrator:
(Optional)

a) John Garcia

b) Responsible for:

(1) creating all line diagrams and flow charts for all 4 lessons.

(2) researching and editing relevant photos from the USGS Science Image Library to be imported into PPT slide presentation.

5. Flash Developer
(Optional)

a) Fred E. Flash

b) Responsible for:

(1) creating a simulation for creating a calculus equation in FrameMath.

VI. Course Outline

> ***A. This should be a separate document in outline format. Please see http://training.usgs.gov/TEL/IL2TEL/DesignDoc/ExCourseOut.html for an example and download the MS Word template.***

VII.   Administration, Evaluation, and Update Plans
(Refer to URL: http://training.usgs.gov/TEL/IL2TEL/DesignDoc/OutlineVII.html **for more information)**

> ### *A. Administration Plan*
>
> > 1.   The Office of Employee Development (OED) will announce the availability of the final TEL web-based course. This will include a posting to the All USGS Employee Bulletin Board, and sending the course announcement to the appropriate USGS listserv for dissemination to subscribers. The course will also be listed on OED's on-line course catalog.
> >
> > 2.   OED will maintain and administer the Breeze server where this TEL web-delivered course will reside. Contact at OED is Tj Lane (303) 445-4677.
> >
> > 3.   OED will provide the Lead Instructional Designer with a temporary Breeze license when changes are needed to the course.
>
> ### *B. Evaluation Plan*
>
> > 1.   Level 1—Measures Reactions
> > (Required)
> >
> > > a)   This evaluation is automatically generated by the Training Management System.
> >
> > 2.   Level 2—Measures Learning
> > (Optional and Recommended)
> >
> > > a)   Lead instructional Designer will create a Level 2 evaluation and send it out to students 3 months after the training has been completed.
> >
> > 3.   Level 3—Measures Transfer of Knowledge to the Job
> > (Optional and Recommended)
> >
> > > a)   After 6 months to 1 year of completion of course, the Lead Instructional Designer will conduct phone interviews, or do an on-line survey, with each of the student's supervisors to see if they have been using FrameMaker and how well they are performing with FrameMaker.
>
> ### *C. Course Update Plan*
>
> > 1.   The Lead Instructional Designer will be responsible for reviewing and updating the course as needed. OED will issue a temporary Breeze license to the Lead Instructional Designer at that time.

VIII.   Related Links and Resources (listed on the additional resources page of the TEL web-based course)
(Refer to URL: http://training.usgs.gov/TEL/IL2TEL/DesignDoc/OutlineVIII.html **for more information)**

> ### *A. Resources and links will include:*
>
> > 1. URL for support: http://www.adobe.com/frame.html
> >
> > 2. URL for FrameMath support: http://www.adobe.com/frame/framemath.html